

SQUIRREL TEASING HANGER ASSEMBLY FOR A BIRD FEEDER

Your Petitioner, RAYMON W. LUSH, a citizen of the United States and a resident of the State of Nebraska, whose post office address is 410 Main Street, Bloomfield, Nebraska 68718, prays that Letters Patent may be granted to him for the invention set forth in the following specification:

BACKGROUND OF THE INVENTION

1. FIELD OF THE INVENTION

This invention relates to a squirrel teasing hanger assembly for a bird feeder or the like and more particularly to a squirrel teasing hanger for a bird feeder which is activated by the weight of the squirrel thereon or which may be activated by a remote control. More particularly, the teaser hanger assembly emits sounds or illuminates lights.

2. DESCRIPTION OF THE RELATED ART

Several types of bird feeders have been designed for preventing unwanted animals such as squirrels from eating the bird food in the feeder. Little prior art exists on rodent repelling hangers where various types of plants, feeders and bird shelters may be hung therefrom. One type of bird feeder has weight-sensitive tiltable perches thereon so when a squirrel or large bird lands on the perch, the perch moves and dislodges the animal. This type of bird feeder is shown in Loken U.S. Patent No. 5,105,765; Wessner U.S. Patent No. 5,048,461; and Dehls U.S. Patent No. 4,541,362.

1 Another type of device uses a shocking system to send an electric impulse
into the unwanted animal when that animal attempts to eat from the feeder. This type
of device is shown in Fry U.S. Patent No. 5,392,732 and Collins U.S. Patent No.
5,471,951.

5 Still another type of repelling device uses weight-sensitive devices to
discourage the unwanted animal from feeding from the feeder. This device shuts off
the food supply when a heavy animal or bird lands upon the perch. This type of
device is taught in Drakos U.S. Patent No. 5,720,238.

10 Yet another type of repelling device to which the present invention pertains
senses the excessive weight of a squirrel or unwanted bird and removes the
unwanted animal at a predetermined point in time. This type of device is taught in
Hibbard U.S. Patent No. 5,297,503; Korb U.S. Patent No. 5,690,056; and Banyas
U.S. Patent No. 6,119,627.

15 Although the squirrel repelling devices of the prior art are noteworthy, there
are many instances when a person does not wish to repel squirrels from the bird
feeder but wish to tease or play with the same without necessarily repelling the
squirrel from the apparatus.

20 SUMMARY OF THE INVENTION

A squirrel teasing hanger assembly for a bird feeder or the like is disclosed
comprising a housing having upper and lower ends with a lower support extending
downwardly from the lower end of the housing which is movable between upper and
lower positions with respect to the housing. The lower support is adapted to have a

1 bird feeder or the like suspended therefrom. An upper support extends upwardly
from the upper end of the housing for attachment to a supporting member such as a
tree branch or the like. A sound-producing device is mounted in the housing and is
powered by a battery-powered circuit in the housing. The lower support is
5 suspended from a load cell mounted in the housing. The load cell is electrically
connected to a battery powered printed circuit board including a microprocessor
whereby the sound-producing device will be activated when the load cell senses the
weight of a squirrel or large bird on the bird feeder. The sound-producing device will
emit a sound such as that of a cat, dog, eagle, hawk, etc. Additionally, a light-
10 emitting device is provided on the housing which will be illuminated to startle the
squirrel on the bird feeder. For enjoyment purposes, the sound-producing device
and the light-emitting device may be actuated by a remote control circuit.

15 It is therefore a principal object of the invention to provide a squirrel teasing
hanger assembly for a bird feeder or the like.

A further object of the invention is to provide a teasing hanger assembly for a
bird feeder or the like which is actuated when a squirrel or large bird is on the bird
feeder.

20 Yet another object of the invention is to provide a squirrel teasing hanger
assembly for a bird feeder or the like which is remotely controlled.

25 Still another object of the invention is to provide a squirrel teasing hanger
assembly for a bird feeder or the like which emits sounds when the weight of a
squirrel or bird on the bird feeder actuates the same.

1

These and other objects will be obvious to those skilled in the art.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective view of the present invention positioned between a tree limb and a bird feeder; and

5

Fig. 2 is a side view illustrating the invention with portions thereof cut away to more fully illustrate the invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

10

The squirrel teasing hanger assembly for a bird feeder or the like of this invention is referred to generally by the reference numeral 10 which is designed to support a bird feeder 11 having food therein. The hanger assembly 10 generally includes an enclosed housing 12 having an upper end 14 and a lower end 16. An upper hook or support 18 is secured to the housing and extends upwardly therefrom for mounting the same on a tree branch or the like such as illustrated in Figures 1
15 and 2.

15

The numeral 20 refers to a lower support in the form of a hook or the like to which the bird feeder 11 may be connected. Preferably, the lower support 20 is constructed of an electrically conductive metal material for a purpose to be described hereinafter. Lower support 20 is connected to a load cell 22 of conventional design. The load cell may be a S-load cell, a beam load cell, or any other type of load cell available on the market. The load cell 22 is conventionally connected by leads 30 and 32 to a conventional circuit board 28 including a microprocessor in conventional fashion.

20

25

1 The numeral 34 refers to a sound-producing mechanism of conventional
construction which when activated emits sounds through a speaker 36 provided in
the housing 12. The circuit board and the circuitry associated therewith are powered
by batteries 38. The numeral 40 refers to a light emitting device such as a light bulb
5 or the like which is activated at the same time the sound-producing mechanism 34 is
activated. The numeral 42 refers to a conventional remote control receiver which is
connected to the circuitry for activating the circuitry upon receiving a signal from a
conventional remote control. An on-off switch 46 is also provided.

10 The load cell 22 is calibrated such that when a filled bird feeder 11 is
supported on the lower support 20, the circuit will be open. If a predetermined weight
is placed on the bird feeder 11, such as a squirrel or large bird, the load cell 22 will
activate the circuit board 28. If the on-off switch 46 is in the "on" position, the sound-
producing mechanism 34 and the light-emitting device 40 may be remotely activated.
15 If the on-off switch is "on," the weight of a squirrel or large bird on the bird feeder 11
will activate the sound-producing mechanism 34 and the light 40. Preferably, the
sound-producing mechanism 34 emits the sound of a cat, dog, eagle, hawk, or other
animal. Thus, when a squirrel is on the bird feeder 11, the squirrel is teased or
20 startled by the action of the sound-producing mechanism 34 or the light 40.

25 Thus it can be seen that a novel squirrel teasing hanger assembly for a bird
feeder or the like has been provided which accomplishes at least all of its stated
objectives.